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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/068,895	02/11/2002	Arito Asai	5-071US-FF	3549

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McGinn & Gibb, PLLC
Suite 200
8321 Old Courthouse Road
Vienna, VA 22182-3817

EXAMINER
TRUONG, CAM Y T

ART UNIT	PAPER NUMBER
2162	

DATE MAILED: 10/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>21 May 2004</u>.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-5</u> is/are pending in the application.
    4a) Of the above claim(s) <u>3</u> is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) <u>1,2,4 and 5</u> is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☒ The drawing(s) filed on <u>11 February 2002</u> is/are: a)☐ accepted or b)☒ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☒ All   b)☐ Some * c)☐ None of:
    1.☒ Certified copies of the priority documents have been received.
    2.☐ Certified copies of the priority documents have been received in Application No. _____.
    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892) ❀
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1.   Claims 1-5 are pending in this Office Action.

Election/Restrictions

2.   Applicant's election without traverse of group I (claims 1-2 and 4-5) in the reply

filed on 5/21/2004 is acknowledged.

Specification

Content of Specification

(a)   <u>Title of the Invention</u>: See 37 CFR 1.72(a) and MPEP § 606. The title of
          the invention should be placed at the top of the first page of the
          specification unless the title is provided in an application data sheet. The
          title of the invention should be brief but technically accurate and
          descriptive, preferably from two to seven words may not contain more
          than 500 characters.

(b)   <u>Cross-References to Related Applications</u>: See 37 CFR 1.78 and MPEP
          § 201.11.

(c)   <u>Statement Regarding Federally Sponsored Research and Development</u>:
          See MPEP § 310.

(d)   <u>Incorporation-By-Reference Of Material Submitted On a Compact Disc</u>:
          The specification is required to include an incorporation-by-reference of
          electronic documents that are to become part of the permanent United
          States Patent and Trademark Office records in the file of a patent
          application. See 37 CFR 1.52(e) and MPEP § 608.05. Computer
          program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)),
          and tables having more than 50 pages of text were permitted as electronic
          documents on compact discs beginning on September 8, 2000.

          Or alternatively, <u>Reference to a "Microfiche Appendix"</u>: See MPEP §
          608.05(a). "Microfiche Appendices" were accepted by the Office until
          March 1, 2001.

(e)   <u>Background of the Invention</u>: See MPEP § 608.01(c). The specification
          should set forth the Background of the Invention in two parts:

      (1)   Field of the Invention: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."

      (2)   Description of the Related Art including information disclosed under 37 CFR 1.97 and 37 CFR 1.98: A description of the related art known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are solved by the applicant's invention. This item may also be titled "Background Art."

(f)   Brief Summary of the Invention: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.

(g)   Brief Description of the Several Views of the Drawing(s): See MPEP § 608.01(f). A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.

(h)   Detailed Description of the Invention: See MPEP § 608.01(g). A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.

(i)   Claim or Claims: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or
        claims must commence on separate sheet or electronic page (37 CFR
        1.52(b)(3)). Where a claim sets forth a plurality of elements or steps, each
        element or step of the claim should be separated by a line indentation.
        There may be plural indentations to further segregate subcombinations or
        related steps. See 37 CFR 1.75 and MPEP § 608.01(i)-(p).

(j)   Abstract of the Disclosure: See MPEP § 608.01(f). A brief narrative of the
        disclosure as a whole in a single paragraph of 150 words or less
        commencing on a separate sheet following the claims. In an international
        application which has entered the national stage (37 CFR 1.491(b)), the
        applicant need not submit an abstract commencing on a separate sheet if
        an abstract was published with the international application under PCT
        Article 21. The abstract that appears on the cover page of the pamphlet
        published by the International Bureau (IB) of the World Intellectual
        Property Organization (WIPO) is the abstract that will be used by the
        USPTO. See MPEP § 1893.03(e).

(k)   Sequence Listing. See 37 CFR 1.821-1.825 and MPEP §§ 2421-2431.
        The requirement for a sequence listing applies to all sequences disclosed
        in a given application, whether the sequences are claimed or not. See
        MPEP § 2421.02.

Title

3.   The title of the invention is not descriptive. A new title is required that is clearly

indicative of the invention to which the claims are directed.

Drawings

4.   Minor informalities: Typographical error is shown in Fig. 2, in element 14

(SERCH INTERFACE). "SERCH" should be written as **"SEARCH"**. In element 15

(SERCH UNIT), "SERCH" should be written as **"SEARCH"**.

Claim Rejections - 35 USC § 102

5.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6.   Claims 1 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Vora

et al (or hereinafter "Vora") (US 5819273).

As to claim 1, Vora teaches a database system (fig. 1, col. 6, lines 37-43)

comprising:

"a database in which data has been stored accessibly" as the mass memory

device 17 of the server computer system 9 stores text documents, which may include

other information such as graphics. These text documents are searched and retrieved

by users of computer system 33. The mass memory is represented as a database (fig.

1, col. 6, lines 37-43);

"a search device for accessing the database in accordance with an applied

search command and searching data that has been stored in said database" as

processor 10 of the server 9 receives a search request from the processor 37 of the

computer system 33 to search documents stored in mass memory 17. The processor

10 of server 9 is represented as a search device. The search request is presented as a

search command (fig. 1, col. 6, lines 48-55);

"a command execution device, to which a command is entered, for applying a

search command to said search device in accordance with this entered command" as

the computer system 33 allows a user to define a search request by typing into a

keyboard keywords. The search request is performed by typically selecting an option

representing a start search command, which is displayed on the display device 47. At

this point, the processor 37 of computer system 33 sends this search request over the

network through network interface 35 and network interface 25 to processor 10 of

server 9. The above information shows that the processor 37 of computer system 33

executes the search request by sending the search request to processor 10 in

accordance with selected start search command. Thus, the processor 37of computer

system 33 is presented as a command execution device. A start search command is

represented as an entered command (fig. 1, col. 6, lines 40-55); and

"a first interface for separably connecting said search device and said command

execution device" as network interface 35 is represented as a first interface for

separably connecting the processor 10 and processor 37 (fig. 1, col. 6, lines 52-55).

As to claim 5, Vora teaches a method of controlling operation of a database

server comprising the steps of:

"receiving a search command transmitted via a network" as processor 10 of

server 9 receives a search request over the network through network interface 35 and

network interface 25. The search request is presented as a search command (fig. 1,

col. 6, lines 50-55);

"searching a database based upon the received search command" as performing

a first search through the document stored in mass memory 17 based upon the

received the search request (col. 6, lines 53-55);

"transmitting the received search command to another database server" as the

server 63 receives search request from server 9. This information implies that the

server 9 transmits the received search request from computer system 33 to the server

63 (fig. 1, col. 6, lines 60-64);

"receiving data, which represents search results, transmitted from the other

database server in accordance with transmission of the search command to the other

database server" as server 9 receives the search results of server 63 as remote

searches after using a local bus 19 of server 9 to transmit the received search request

to server 63. Thus, the server 9 combines the search results of such remote searches

with the results of the search the server 9 performs on mass memory 17 (fig. 1, col. 6,

lines 60-67; col. 7, line 1); and

"outputting, in mutually correlated form, data representing search results

obtained by the search and data representing received search results" as displaying the

combined results of such remote searches with the search results of the server 9

performs on data stored in memory 17 within one window. The combined results are

represented as correlated form (fig. 1, col. 6, lines 65-67; col. 7, lines 1-4).

Claim Rejections - 35 USC § 103

7.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

8.   Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vora et al

(or hereinafter "Vora") (US 5819273) in view of Sanada et al (or hereinafter "Sanada")

(US 6484245).

As to claim 2, Vora further teaches "a storage device for storing data readably"

as information storage devices coupled to server 63 for storing data. This data is

searched and retrieved through by searching software on server 63 (col. 6, lines 58-59).

Vora does not explicitly teach the claimed limitation "a storage controller for

accessing said storage device and reading data that has been stored in said storage

device or writing data to said storage device in accordance with an applied read/write

command; and a second interface for separably connecting said storage controller and

said command execution device; said command execution device applying a read/write

command to said storage controller in accordance with the entered command".

Sanada teaches the above claimed limitations:

"a storage controller for accessing said storage device and reading data that has

been stored in said storage device or writing data to said storage device in accordance

with an applied read/write command" as the storage controller 40 controls accessing to

the disk array for reading data from there upon receipt of read command information

from host computer 10 (fig. 1, col. 5, lines 9-10; col. 6, lines 1-8);

"and a second interface for separably connecting said storage controller and

said command execution device" as Fibber Channel Fabric as an interface for separably

connecting the storage controller and the host computer 10. Because the host computer

10 generates an access request and then executes the access request by sending

access request to the microprocessor of the storage controller; thus, the host computer

is represented as command execution device (fig. 1, col. 5, lines 35-37; col. 6, lines 1-

3);

" said command execution device applying a read/write command to said storage

controller in accordance with the entered command" as the host computer can applies a

read command or write command to microprocessor of the storage controller. The

above information implies that the host computer has included a command to can send

a read or a write command to the microprocessor of the storage controller. This

command is represented as the entered command (col. 5, lines 45-55; col. 6, lines 1-3).

It would have been obvious to a person of an ordinary skill in the art at the time

the invention was made to apply Sanada's teaching of using storage controller to control

subsystem 50 for reading data, Fibber Channel Fabric for connecting the storage

controller and the host computer 10, and applying a read command from the host

computer 10 to the storage controller to Vora's system in order to improve the integrity

of Vora's system by allowing a user to access a storage device for reading or writing

stored data in the storage device and further eliminating unauthorized access attempts

from the host computers to the storage control device.

9.   Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vora et al

(or hereinafter "Vora") (US 5819273) in view of De Bellis (US 6760720).

As to claim 4, Vora teaches a database server (fig. 1, col. 6, lines 37-40)

comprising:

"a first receiving device for receiving a search command transmitted via a

network" as the network interface 25 of server 9 receives a search request transmitted

from processor 37 over the network. The network interface 25 is represented as a first

receiving device. The search request is represented as a search command (fig. 1, col.

6, line 51-55);

"a search device for searching the database based upon the search command

received by said first receiving device" as the processor 10 of server 9 executes the

received search requests from computer system 33 by performing a first search through

the documents is stored in mass memory 17 as a database. The processor 10 is

represented as a search device (col. 6, lines 51-55);

"a transmitting device for transmitting the search command, which has been

received by said first receiving device, to another database server" as a local bus 19 of

server 9 is used to transmit the received search requests from server 9 to the server 63.

After receiving the search request from server 9, the server 63 executes the search

request by searching the data. The local bus 19 of server 9 is represented as a

transmitting device (fig. 1, col. 6, lines 60-66; col. 6, lines 1-5);

"for receiving data, which represents search results, transmitted from said other

database server in accordance with transmission of the search command to said other

database server by said transmitting device" as server 9 receives the search results of

server 63 as remote searches after using a local bus 19 of server 9 to transmit the

received search request to server 63. Thus, the server 9 combines the search results of

such remote searches with the results of the search the server 9 performs on mass

memory 17 (fig. 1, col. 6, lines 60-67; col. 7, line 1);

"and an output device for outputting, in mutually correlated form, data

representing search results obtained by the search by said search device and data

representing search results received by said second receiving device" as I/O device (s)

23 of the server 9 is used to display or output the combined results of such remote

searches with the results of the server 9 performs on data stored in memory 17 within

one window. The I/O device (s) of the server 9 is represented as an output device. The

combined results are represented as correlated form (fig. 1, col. 6, lines 65-67; col. 7,

lines 1-4).

Vora does not explicitly teach the claimed limitation "a second receiving device".

De Bellis teaches a search engine has a Request Analyzer 130 for receiving

search request from client 114 and a Database Driver 170 for receiving results of

search of the remote database 12 on Internet. The Database Driver 170 is represented

as a second receiving device (figs 3&9, col. 4, lines 45-60; col. 4, lines 20-25; col. 9, lines 40-43).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply De Bellis's teaching of a Database Driver 170 for receiving results of search of the remote database 12 on Internet to Vora's system in order to improve flexibility of Vora's system by performing searching/retrieving and displaying a search result to a user quickly and further preventing network traffic between client and server.

Conclusion

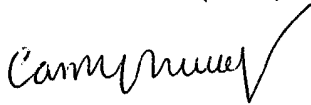10.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure

US 6694413 is issued to Mimatsu et al on 2/17/2004. The subject matter is considered pertinent to claim 2 (e.g., disk controller in fig. 1).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cam Y T Truong whose telephone number is (703) 605-1169. The examiner can normally be reached on Monday to Firday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (703) 305-9790. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Cam-Y Truong
Patent Examiner
Art Unit : 2172
9/30/2004